



# **Community Assets**

Social determinants of health are socioeconomic, environmental, and social resources that lay the foundation for health during childhood and may have lasting effects through adulthood (1). The previous chapter presented data on socioeconomic determinants of health such as educational attainment, employment, income, and housing status and the association of these factors with specific health outcomes. This chapter will focus on community-level social determinants of health referred to as "community assets." Broadly speaking, community assets are the collective resources that make it easier for people to make healthy choices. An asset-based approach recognizes the importance of social, cultural, and physical resources that exist within the community (2).

Community assets increase an individual's opportunity to engage in activities that improve health and well-being (3). Anything that improves the quality of community life may be considered a community asset (4) including:

- Community programs such as community gardens and farmer's markets
- Local businesses such as grocery stores and restaurants
- Natural resources such as rivers, trees, and green space
- Built environment such as parks, playgrounds, and walking paths
- Neighborhood groups such as community advisory and crime watch groups
- Municipal services such as police, fire, and recreation services
- Public institutions such as schools, churches, and libraries
- Resources promoting civic engagement such as call services for reporting non-emergency issues to local officials (e.g. Boston 311)

Access to healthy foods, active living environments, opportunities that give individuals a voice in the political process, and good municipal services may contribute to the health of residents (5-10). Although all communities have assets that contribute to health, their distribution varies considerably. Research demonstrates that communities of color and low-income populations are less likely to have resources such as grocery stores, parks, and recreational programs that promote health (11-13). Since community assets play a significant role in the health and well-being of residents, recognizing and building upon existing community assets, and building assets where needed, are essential ingredients in increasing health equity. This chapter outlines some of the community asset indicators of civic engagement and the built environment which exist in Boston neighborhoods.

#### Civic Engagement

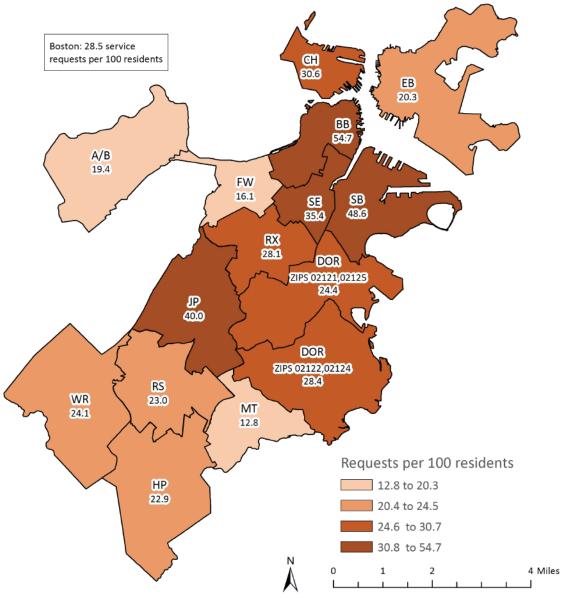
Civic engagement creates healthier communities through an engaged population aiming to improve quality of life. Voting and volunteering are among the many measures of an engaged population. In both cases, people's actions show they care about the outcomes of their community or their nation, and they want to cultivate positive change (14).

Resources that promote civic engagement, such as voting, may influence health and well-being in the population by providing vehicles of increased involvement and responsibility of residents in their communities (15-21). Organizations like Main Street Districts and Community Development Corporations provide residents with an opportunity to shape the design of their neighborhoods. Municipal governments can encourage residents to be involved in their community by listening to and responding quickly to community concerns. Boston 311 is a city service provided to residents for reporting non-emergency issues (e.g. reporting a street lamp is out) and requesting city services and information through phone calls, the online self-service form, Twitter, and the mobile application. Digitally connected reporting systems such as Boston 311 increase civic engagement by providing an easy way for residents to request and hold government accountable for delivering non-emergency services like street cleaning, snow plowing, and pothole repair (15). Voting and participation in voluntary social associations have been associated with better self-reported health (16-18). Active engagement in one's community has been associated with a range of positive health outcomes including improved physical and psychological health, increased psychosocial well-being, and reduced mortality rates (19-21).

In this section of the report, we summarize indicators of civic engagement including Boston 311 service requests and voter turnout rates.



Figure 3.1 Constituent-Initiated 311 Service Requests<sup>1</sup> by Neighborhood, 2016



<sup>1</sup>Rate per 100 residents

NOTE: "BB" includes the Back Bay, Beacon Hill, Downtown, the North End, and the West End. "SE" includes the South End and Chinatown. Data includes 311 service requests by phone, online, and through the mobile application. Voting precinct was used to identify neighborhood location. When a precinct was split across neighborhoods, the number of service requests was allocated proportionally by area size. Density calculations were based on the 2010 Census population. Does not include Harbor Islands.

DATA SOURCE: 311 Service Requests, City of Boston; Decennial Census 2010, U.S. Census Bureau

Boston 311 is a service provided for residents to report non-emergency issues and request city services and information. In 2016, Boston residents made over 174,000 Boston 311 reports and service requests (about 28.5 requests per 100 residents) through phone calls, the online self-service form, and the mobile application. Back Bay (55 per 100 residents) and South Boston (49 per 100 residents) had the highest number of service requests, while Mattapan (13 per 100 residents) and Fenway (16 per 100 residents) had among the lowest number of service requests.

In 2016, there were over 181,000 Boston 311 reports and service requests made by Boston residents. Of those, the highest number requests were made for parking enforcement with 25,701 requests. Other leading types of service requests included requests for street cleaning, scheduling a bulk item pickup for garbage or recycling, missed trash or recycling item, and improper trash storage.

Figure 3.2 Leading Types of 311 Service Requests, 2016

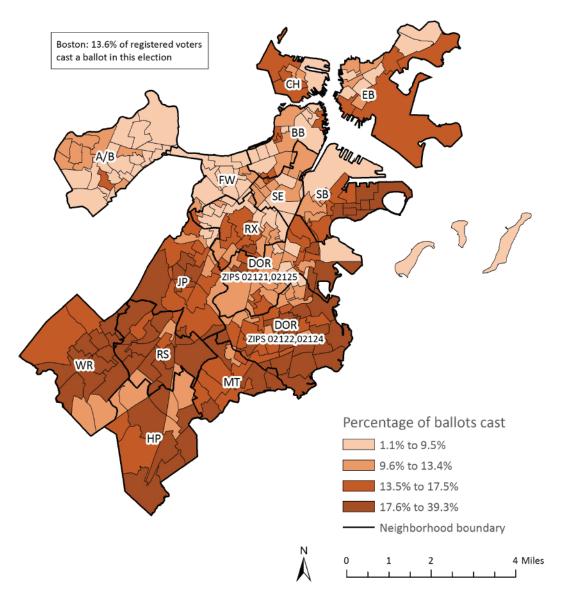
	Number of Calls
Parking enforcement	25,701
Requests for street cleaning	11,995
Schedule a bulk item pickup	11,465
Missed trash/recycling/yard waste/bulk item	9,488
Improper storage of trash (barrels)	8,850

NOTE: Data includes 311 reports and service requests by phone, online, and through the mobile application.

DATA SOURCE: 311 Service Requests, City of Boston.



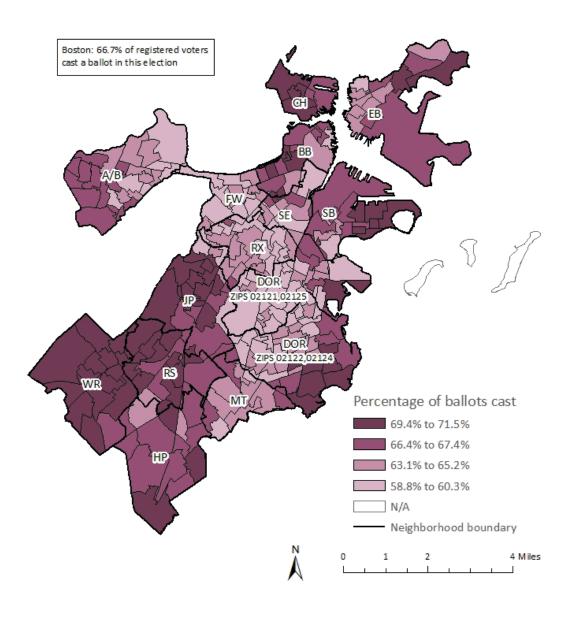
Figure 3.3 Voter Turnout for the November 3, 2015 Municipal Election by Voting Precinct



NOTE: "BB" includes the Back Bay, Beacon Hill, Downtown, the North End, and the West End. "SE" includes the South End and Chinatown. Includes Thompson, Spectacle, and Long Islands. Percentages are based on the number of registered voters in each precinct.

DATA SOURCE: State and City Election Results, November 3, 2015: Municipal Election, City of Boston Election Department.

Figure 3.4 Voter Turnout for the November 8, 2016 General Election by Voting Precinct



NOTE: "BB" includes the Back Bay, Beacon Hill, Downtown, the North End, and the West End. "SE" includes the South End and Chinatown. Percentages are based on the number of registered voters in each precinct. Thompson, Spectacle, and Long Islands (Ward 1, Precint 15) were excluded due to outlier issue.

DATA SOURCE: State and City Election Results, November 8, 2016: General Election, City of Boston Election Department.

The voter turnout rate is the percentage of registered voters who cast a ballot in an election. The voter turnout rate for the general (presidential) election in November 2016 was 67% in Boston, while the turnout rate for the municipal election in November 2015 was considerably lower at 14% in Boston. The turnout rate also differed across precincts. In general, precincts where residents were more likely to own their homes (vs. rent), such as Charlestown, South Boston, Roslindale, West Roxbury, and some parts of Dorchester (zip codes 02122, 02124), had among the highest rates of voter turnout. Precincts with larger communities of color, such as Roxbury, Dorchester, and Mattapan, had higher rates of voter turnout in the municipal election in contrast with areas of downtown Boston where the percentages of ballots cast were very low.

#### **Built Environment**

The built environment includes all of the physical parts of where we live, work, and play. It relates to land uses, transportation systems, buildings, parks, traffic systems, trails, housing and so forth (22, 23). In public health, built environment refers to physical environments that are designed with health and wellness as integral parts of the communities. Research has indicated that the way neighborhoods are created can affect both the physical activity and mental health of the communities' residents (24).

Built environments that are expressly designed to improve physical activity may lead to higher rates of physical activity, which in turn, positively affects health in the population (25). The natural and built environment of parks, playgrounds, recreation centers, and walking paths support physical activity by providing places for people to engage in exercise and active play. Community programs and businesses that support healthy eating by providing easy access to fresh and affordable food include local grocery stores, community gardens, farmer's markets, and food banks. Research has shown that lack of these structures may contribute to sedentary habits, which may further lead to poor health outcomes such as chronic disease (26, 27). When such structures are missing from the community, residents are less likely to eat nutritious foods, be physically active, or engage in community activities (28-31).

In this section of the report, we summarize indicators of the built environment including land use and zoning; residential property values; protected and recreational open space and bicycle trails; walkability; activity centers; landmarks, historic districts, and main street districts; food resources; and schools, colleges, and universities.



BB A/B FW SB SE RX DOR ZIPS 02121,02125 DOR 1 ZIPS 02122,02124 RS MT Legend Land use and zoning Residential (49%) Business, institutional, industrial, and mixed-use (24%) Open space and miscellaneous (27%) Neighborhood Neighborhood boundary NOTE: "BB" includes the Back Bay, Beacon Hill, Downtown, the North End, and the West End. "SE" includes the South End and Chinatown. Logan International Airport is categorized under miscellaneous. Mixed-use zones (which may contain residential 4 Miles units) were excluded from residential area calculations, and the Harbor Islands were excluded from all calculations.

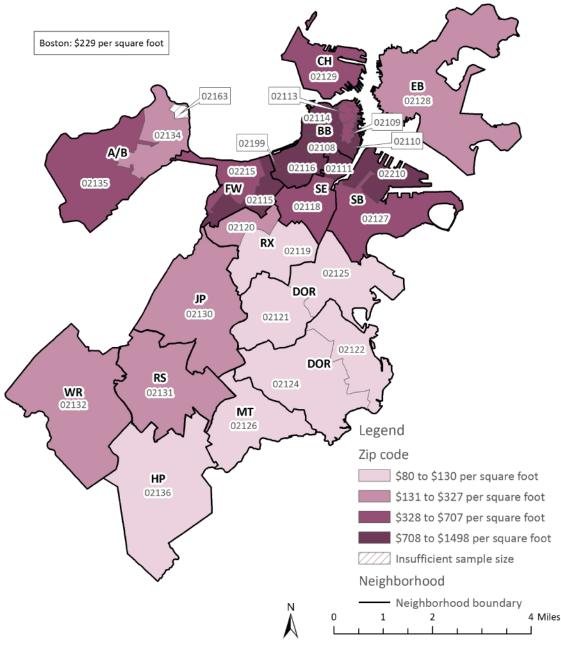
Figure 3.5 Land Use and Zoning, 2016

DATA SOURCE: Zoning Subdistricts, BostonGIS, City of Boston.

Land use in Boston is regulated through zoning. Approximately 49% of Boston's 47 square miles (excluding Harbor Islands) is zoned residential while approximately 24% is zoned as business, institutional, industrial, or mixed-use. The remaining 27% consists mostly of open space and miscellaneous.

While residential zones can be found throughout the city, most of Boston's business, institutional, industrial, and mixed-use zones are concentrated in the northern half of the city in the neighborhoods of Charlestown, Dorchester (zip codes 02121, 02125), Back Bay, South Boston, South End, Roxbury, Fenway, and Allston/Brighton. Most of the largest continuous parcels of open space and miscellaneous zoning can be found in the central and southwestern sections of the city spread across the neighborhoods of Dorchester (zip codes 02121, 02125), Dorchester (zip codes 02122, 02124), Jamaica Plain, Mattapan, Roslindale, Hyde Park, and West Roxbury. Logan International Airport is also classified as miscellaneous and makes up roughly half the area of East Boston.

Figure 3.6 Median Residential Property Value by Zip Code, 2017

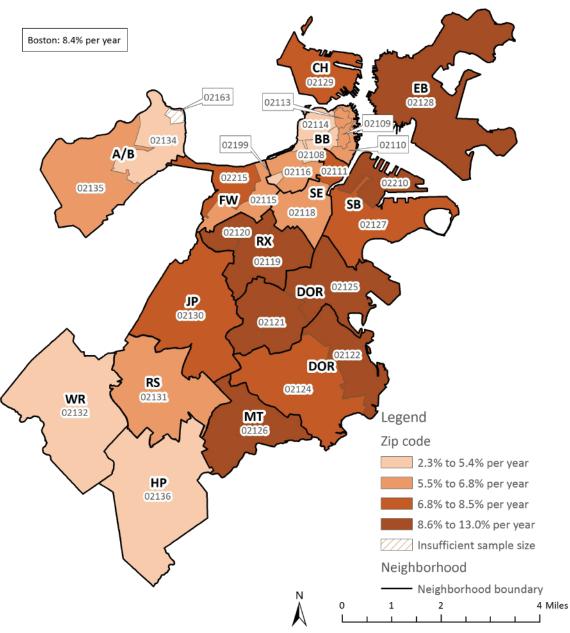


NOTE: "BB" includes the Back Bay, Beacon Hill, Downtown, the North End, and the West End. "SE" includes the South End and Chinatown. Restricted to residential or mixed-use properties with assessed values and living space. Data for the portion of zip code 02467 in Boston are not presented. Does not include Harbor Islands.

DATA SOURCE: Property Parcel Data, 2017, City of Boston Assessing Department.

The median assessed value of residential properties in Boston increased from \$171 per square foot in 2014 to \$229 per square foot in 2017, after adjusting for inflation. The highest per square foot median assessed value occurred in the zip codes 02199 (\$1498/sq ft) and 02108 (\$894/sq ft). The lowest per square foot median assessed value occurred in zip codes 02121 (\$80/sq ft) and 02126 (\$106/sq ft).

Figure 3.7 Average Annual Growth in Median Residential Property Value by Zip Code, 2014 to 2017

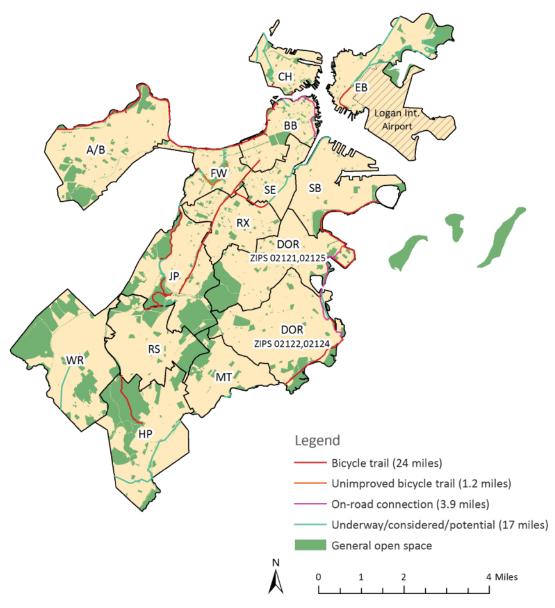


NOTE: "BB" includes the Back Bay, Beacon Hill, Downtown, the North End, and the West End. "SE" includes the South End and Chinatown. Restricted to residential or mixed-use properties with assessed values and living space. Data from 2014 was adjusted for inflation using the Consumer Price Index. Data for the portion of zip code 02467 in Boston are not presented. Does not include Harbor Islands.

DATA SOURCE: Property Parcel Data, 2014 and 2017, City of Boston Assessing Department.

The median per square foot assessed value of residential properties in Boston increased 34% in 4 years between 2014 and 2017, or 8% per year, after adjusting for inflation. The largest increases in the median per square foot assessed value within a zip code were observed in the zip codes associated with South Boston/Waterfront (13% per year in 02210), East Boston (11% per year in 02128), Mission Hill (11% per year in 02120), Roxbury (11% per year in 02119) and Dorchester (zip codes 02121, 02125) (10% per year in 02125).

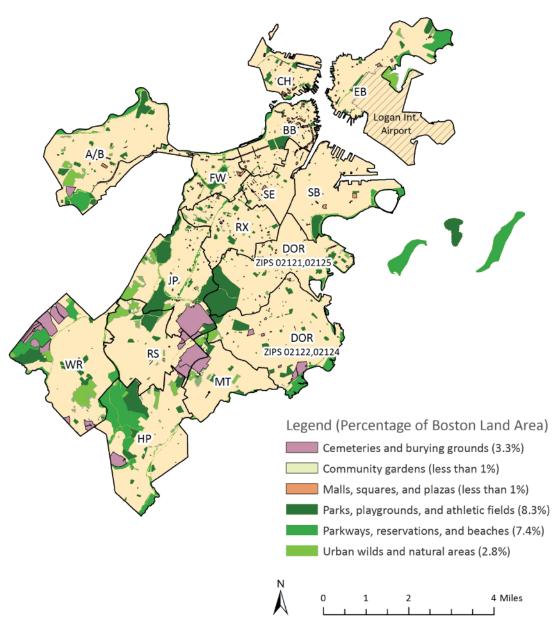
Figure 3.8 General Open Space and Bicycle Trails by Neighborhood, 2017



DATA SOURCE: Boston Open Sapce, Parks and Recreation Department, City of Boston; and Bicycle Trails, Office of Geographic Information (MassGIS).

Boston's protected and recreational open space provides residents with access to parks and greenery for leisure and exercise. There are approximately 11 square miles of open space and about 29 miles of bicycle trails in Boston. The largest portions of bicycle trails are in East Boston and Hyde Park (about 6 miles each). There are less than 1 mile of bicycle trails in Mattapan and Roslindale. In addition, there about 17 miles of potential bicycle trails under development (i.e., underway, considered, or proposed). About 1.2 miles of the bicycle trails remain unimproved or unpaved.

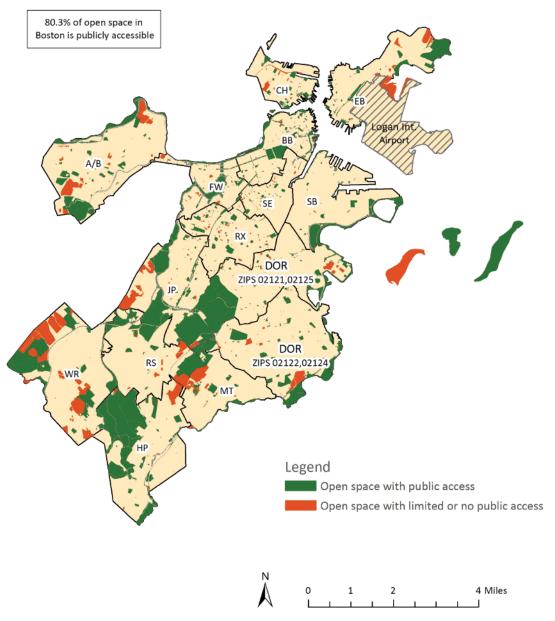
Figure 3.9 General Open Space by Type and Neighborhood, 2017



DATA SOURCE: Boston Open Space, Parks and Recreation Department, City of Boston.

Approximately 11 square miles of Boston's 48 square miles (including the Harbor Islands) is open space. Boston's open space consists of cemeteries and burying grounds (3%); community gardens (less than 1%); malls, squares, and plazas (less than 1%); parks, playgrounds and athletic fields (8%); parkway, reservations, and beaches (8%); and urban wilds and nature areas (3%).

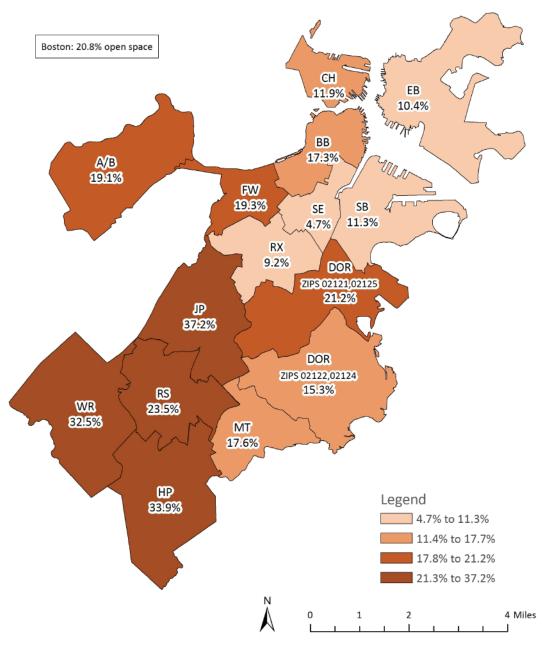
Figure 3.10 General Open Space by Public Access, 2017



DATA SOURCE: Boston Open Space, Parks and Recreation Department, City of Boston.

Approximately 80% or 8.8 square miles of Boston's open space is publicly accessible. Public access to some of open space may be limited, depending on location and ownership.

Figure 3.11 Percentage of General Open Space by Neighborhood, 2017



DATA SOURCE: Boston Open Space, Parks and Recreation Department, City of Boston.

Approximately 21% percent of Boston neighborhoods, excluding the Harbor Islands and including ponds and reservoirs, is open space. Jamaica Plain (37%) and Hyde Park (34%) have the highest percentages of land consisting of open space, while the South End (5%) and Roxbury (9%) have the least.

Boston Walk Score: 81 CH 02129 EB 02113 02163 02109 02199 02134 BB 02110 A/B 02108 02116 0211 02215 02135 FW SE SB 02115 02118 02127 02120 RX 02119 DOR 02125 JP 02130 02121 02122 DOR RS 02124 02131 WR 02132 MT 02126 Legend Walk Score by zip code 57 to 71 HP 02136 72 to 83 84 to 94 95 to 99 Neighborhood Neighborhood boundary 4 Miles

Figure 3.12 Walk Score by Zip Code, 2017

NOTE: "BB" includes the Back Bay, Beacon Hill, Downtown, the North End, and the West End. "SE" includes the South End and Chinatown. Walk Score is an index of pedestrian-friendliness that ranges from 0 to 100. Data for the portion of zip code 02467 in Boston were unavailable. Does not include Harbor Islands.

DATA SOURCE: Walk Score, www.walkscore.com.

Walkability is a measure of accessibility by walking. The Walk Score walkability index, published by www.walkscore.com, ranges from 0 to 100, based on walking routes to local destinations such as grocery stores, parks, schools, and store outlets. Boston is the 3rd most walkable large city with a Walk Score of 81. In 2017, the Walk Score varied widely by zip code in Boston from 57 to 99. The highest Walk Score was observed in the zip codes associated with North End (99 in 02113) and Back Bay/Bay Village (98 in 02199), while the lowest Walk Score was observed in the zip codes associated with Hyde Park (57 in 02136) and West Roxbury (61 in 02132).

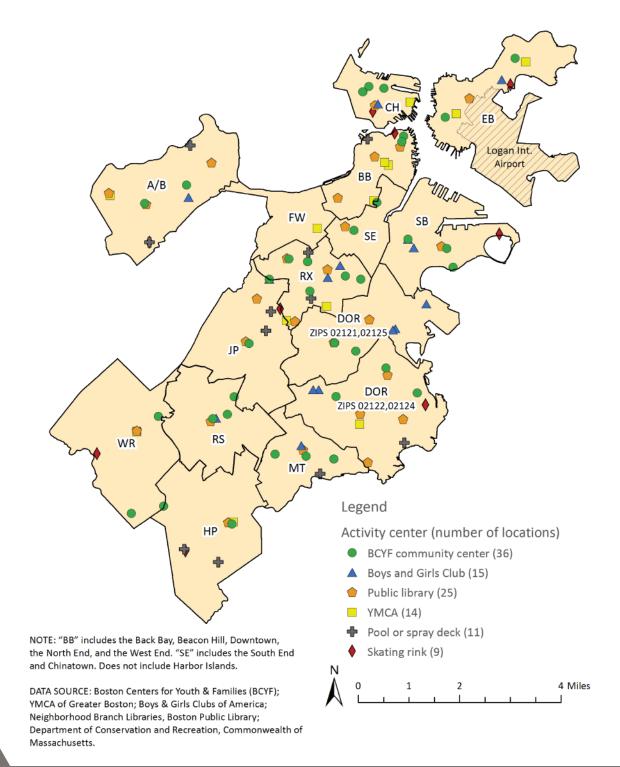
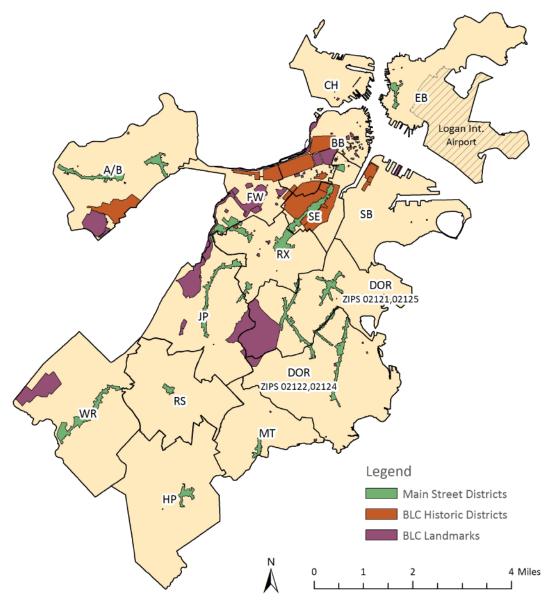


Figure 3.13 Activity Centers by Neighborhood, 2016

There are a variety of activity centers offering affordable individual and group-based extracurricular activities for youths and adults in Boston. The 25 locations of the Boston Public Library were visited by 3.7 million people last year. The city also maintains 36 Boston Centers for Youth and Families (BCYF). The Boys and Girls Clubs of America has 15 locations in Boston and the YMCA has 14 facilities. There are also 11 public swimming pools and spray decks, and 9 ice skating rinks in Boston.

Figure 3.14 Landmarks, Historic Districts, and Main Street Districts by Neighborhood, 2017



NOTE: "BB" includes the Back Bay, Beacon Hill, Downtown, the North End, and the West End. "SE" includes the South End and Chinatown. Landmarks and historic districts are designated by the Boston Landmarks Commission (BLC). Main Streets are commercial districts sustained by a network of Main Streets Organizations. Does not include Harbor Islands.

DATA SOURCE: BLC Landmarks, BLC Historic Districts, and Main Street Districts from BostonGIS, City of Boston.

Boston is rich with cultural heritage. A number of city and community organizations have been established to preserve and protect historic buildings, places, and neighborhoods. Boston Main Streets, comprised of 20 Main Streets Organizations, aims to sustain healthy commercial districts through creative revitalization. The Boston Landmarks Commission (BLC) aims to preserve Boston's historical neighborhoods through official designation of landmarks and historical districts and architectural design review. Nine local Historic District Commissions review property proposals within each Historic District.

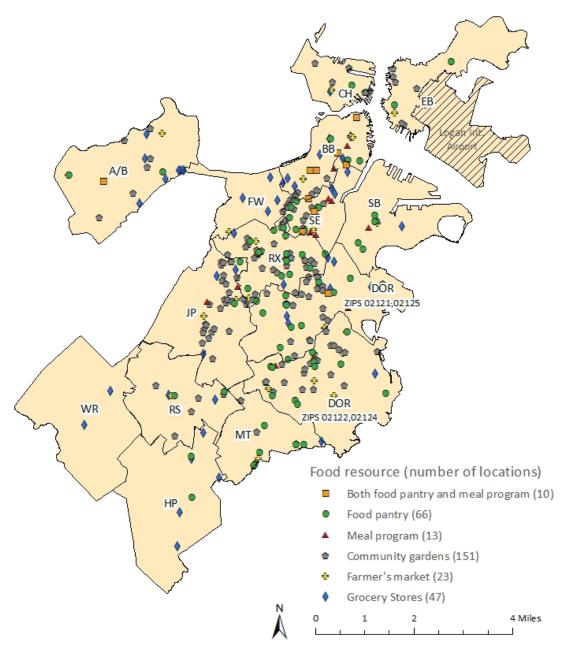
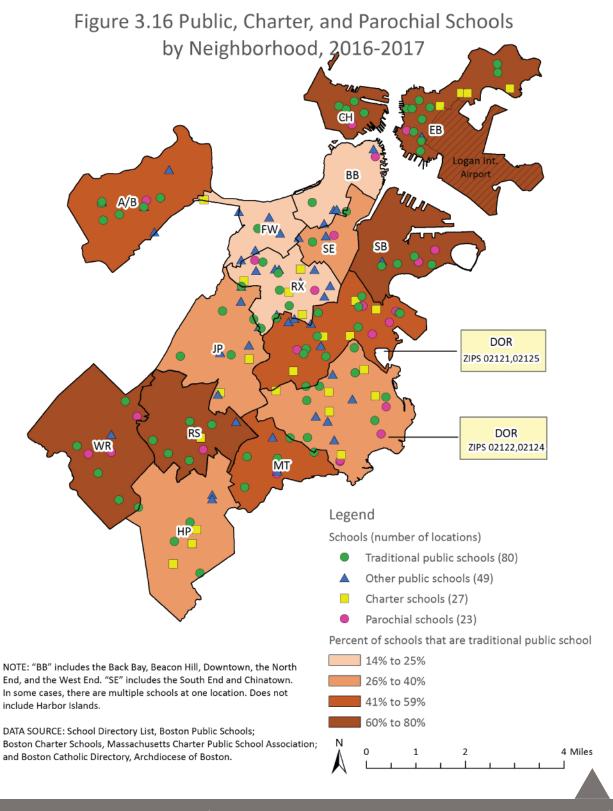


Figure 3.15 Food Resources by Neighborhood, 2016

NOTE: "BB" includes the Back Bay, Beacon Hill, Downtown, the North End, and the West End. "SE" includes the South End and Chinatown. Does not include Harbor Islands.

DATA SOURCE: The Greater Boston Food Bank; Trustees Boston Community Gardens, The Trustees of Reservations; The Mayor's Office of Food Access, City of Boston; InfoUSA Business Database, Boston Planning & Development Agency Research Division Analysis

Boston offers a wide network of food resources for local communities. The Mayor's Office of Food Access, in conjunction with local community organizations like the Greater Boston Food Bank, works to ensure that Boston residents have access to fresh and healthy food. The network of local food resources includes food pantries and meal programs, community gardens, farmer's markets, and local grocery stores. In 2016, Boston residents had access to 151 community gardens, 89 food pantries and meal programs, 47 grocery stores, and 23 farmer's markets within Boston city limits.



Boston Public Schools (BPS) and a network of independent schools provide Boston residents with access to education for grades K-12. Of 181 public, charter, or parochial school locations, 80 were identified as traditional public schools, 49 as other types of BPS-operated public schools, 27 as charter schools, and 25 as parochial schools. Sixty to eighty percent of schools in Charlestown, East Boston, Roslindale, South Boston, and West Roxbury are traditional public schools.

The 49 other types of BPS-operated public schools include: 3 alternative schools, 4 early education centers, 3 exam schools, 7 Horace Mann/in-district charter schools, 1 inclusion, 6 innovation, 20 pilot, 4 special, and 1 specialized. For definitions of each school type, please refer to Boston Public Schools' official website at http://www.bostonpublicschools.org/Page/941.

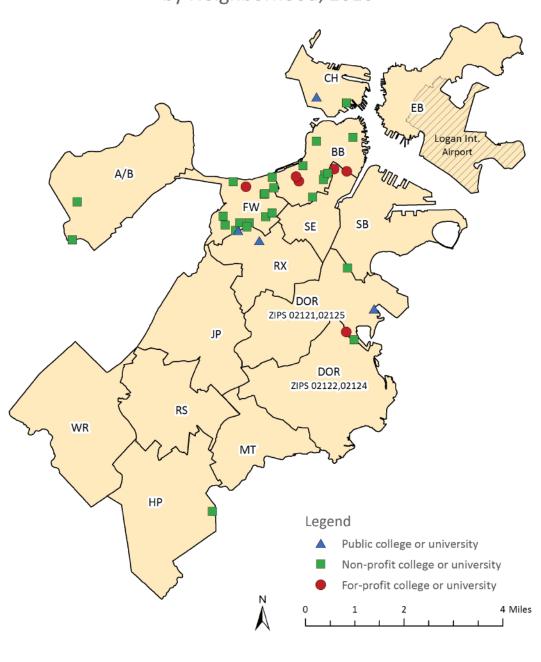


Figure 3.17 Colleges and Universities by Neighborhood, 2016

NOTE: "BB" includes the Back Bay, Beacon Hill, Downtown, the North End, and the West End. "SE" includes the South End and Chinatown. One non-profit college located in the zip code 02467 (not pictured) is not represented on the map. Does not include Harbor Islands.

DATA SOURCE: College Navigator, National Center for Educational Statistics.

Boston residents have access to a variety of local centers of higher education. In addition to four public colleges and universities within the city boundary, there are 29 private non-profit colleges and universities and 6 for-profit schools. Many of these colleges and universities are in the neighborhoods of Fenway or Back Bay.

### **Summary**

This chapter described the distribution of various community assets related to civic engagement and the built environment among Boston residents, many of which vary at the neighborhood level. Voter turnout for the general presidential election of November 2016 (67%) was considerably higher than for the municipal election of the previous year (14%). We also observed a wide range in voter turnout across precinct for both elections; precincts with lower voter turnout for both elections were concentrated in the neighborhoods of Allston/Brighton, Dorchester (zip codes 02121, 02125), Fenway, and Roxbury.

While Boston offers a wide network of food resources for local communities, there is only one grocery store, at most, in the neighborhoods of East Boston, Mattapan, and South Boston. According to Walk Score, Boston is the 3rd most walkable large city in 2017, but Walk Scores varied across zip code. The zip codes with lower Walk Scores were found in Allston/Brighton, Hyde Park, Jamaica Plain, Mattapan, Roslindale, and West Roxbury. Although there are about 29 miles of bicycle trails throughout Boston, less than 1 mile of the bicycle trails are in Mattapan and Roslindale.

The median assessed residential value in Boston is \$229 per square foot. The neighborhoods of Dorchester (zip codes 02121, 02125), Dorchester (zip codes 02122, 02124), Hyde Park, Mattapan, and Roxbury have lower median assessed residential values ranging between \$80 and \$130 per square foot. However, the residential properties in these neighborhoods, with exception to Hyde Park, are growing in value at a faster rate with the average annual growth rate between 8 and 13% per year since 2014.

## **Community Assets**

**174,000** Boston 311 calls placed in 2016



15% of calls were for parking enforcement





The voter turnout rate for the municipal election in November 2015 was

14%



The voter turnout rate for the general presidential election in November 2016 was

67%





According to Walk Score, Boston is the 3rd most walkable large city in 2017



Health of Boston 2016-2017

### Our Point of View: Thoughts from public health

#### A Dorchester Neighborhood Rich in Community Assets

By Makaila Manukyan
Program Manager, Office of Health Equity
Boston Public Health Commission
And
Marcos Beleche
Associate Director, Codman Square Neighborhood Development Corporation

Access to affordable quality housing, transportation, education, healthy food, decent jobs, and health care can promote health and wellbeing – that is public health! The Codman Square community has worked tirelessly to put all of these assets into their 1.5 square mile neighborhood. In support of those residents, the Codman Square Neighborhood Development Corporation (CSNDC) in Dorchester promotes health by addressing social determinants of health in all its work and has been doing so for over 35 years. Until just a few years ago, they didn't really know that they were practicing public health.

The CSNDC began its work on housing to reverse the depreciation of property values in the 1970s and 1980s due to arson and white flight. At that time, community activists took a stand and renovated family properties and sold them to low and moderate-income first-time home buyers. In the fall of 1981, the Codman Square Housing Development Corporation was formed and for the next 30 years, it developed and rehabilitated large rental housing developments, collaborating with Codman Square Health Center and Codman Square Neighborhood Council among many others. In 1993, the organization changed its name to its current one to acknowledge the community development and organizing work it was doing beyond housing and has been going strong ever since.

One of the strengths of the CSNDC is its deep understanding of the uneven burden of poor health outcomes that low-income and people of color bear. Working with many partners – faith leaders, small businesses, and local political leaders, plus thousands of devoted community residents – the CSNDC is preserving and building the neighborhood by focusing on the intersection of health and community development. They take every opportunity to integrate equity into their work. Not only do they engage youth, they are also engaging reentry citizens. They have used their urban farm project – OASIS on Ballou – to provide jobs to formerly incarcerated men of color. Housing is high on their list of priorities. The CSNDC has created 1126 units of protected rental and ownership properties, and provides financial and housing counseling supports.

Residents have made this community their own by investing in what they needed to create a healthy and livable neighborhood. It has its own school, health center, grocery store, thousands of affordable housing units, locally-owned businesses, and about 10 community gardens and three different urban farming entities. As Boston neighborhoods become gentrified, the community is focused on ensuring that the long-term residents of this predominantly Black /Afro Caribbean and Latino neighborhood can stay. The Codman Square community is not wealthy but it is asset-rich!

### Our Point of View: Thoughts from a community resident

#### A Community We Can Live and Work in

By Lakisha Jordan and Darryl Jordan Lakisha and Darryl are longtime Codman Square, Dorchester residents involved in their community.

We are very appreciative of the Codman Square Neighborhood Development Corporation (CSNDC). We grew up in Codman Square, ended up at the same college and will soon be married. We came back to our Codman Square community and very much wanted to stay. About six years ago we applied for affordable rental housing. We were #654 on the lottery application! Luckily we were selected and were the first to put down our deposit on an apartment in the Levedo building. Codman Square Neighborhood Development Corporation built our apartment building. It is a "green" building with solar panels, energy efficiency, rainwater irrigation, and more. I believe in being involved in my community and always attend the meetings for our building.

Living in an affordable apartment made it possible to save money to own a home. We are currently building a two-family home on the street we once grew up on. We took advantage of a Codman Square community meeting and found out that paying rent on time helps with your credit score. We also took advantage of the City of Boston home-ownership certificate program, to be knowledgeable about owning a home.

We are in the process of opening a hydroponic store and also accessing garden plots. I am interested in private gardens for clinicians and their clients in the community, so that clients have peacefulness. Our community has experienced trauma, and therapy isn't contained in four walls. Codman Square NDC pointed us in the direction to develop a business plan and connected us with others interested in the same work. We are excited to bring another needed resource to our community.

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